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(71) Applicant: **BATTELLE MEMORIAL INSTITUTE**  
[US/US]; Pacific Northwest Division, Intellectual Property  
Services, P.O. Box 999, Richland, WA 99352 (US).

(72) Inventors: **TONKOVICH, Anna, Lee, Y.**; 1604 North  
37th Place North, Pasco, WA 99301 (US). **WANG, Yong**;  
2884 Troon Ct., Richland, WA 99352 (US). **FITZGER-**  
**ALD, Sean, P.**; 2670 Dornoch Place, Richland, WA 99352  
(US). **MARCO, Jennifer, L.**; 5318 West Dradie Avenue,  
Pasco, WA 99301 (US). **ROBERTS, Gary, L.**; 3395 East-  
lake Court, West Richland, WA 99353 (US). **VANDER-**  
**WIEL, David, P.**; 2550 Duportail St., G-241, Richland,  
WA 99352 (US). **WEGENG, Robert, S.**; 2603 Harris Av-  
enue, Richland, WA 99352 (US).

(74) Agent: **MAY, Stephen, R.**; Battelle Memorial Institute,  
Pacific Northwest Division, Intellectual Property Services,  
P.O. Box 999, MSIN: K1-53, Richland, WA 99352 (US).

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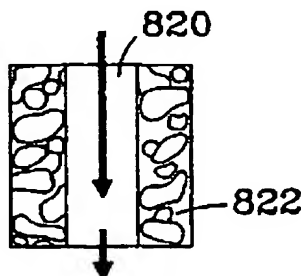
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(54) Title: **A CHEMICAL REACTOR AND METHOD FOR GAS PHASE REACTANT CATALYTIC REACTIONS**



(57) Abstract: The present invention provides chemical reactors and reaction chambers and methods for conducting catalytic chemical reactions having gas phase reactants. In preferred embodiments, these reaction chambers and methods include at least one porous catalyst material that has pore sizes large enough to permit molecular diffusion within the porous catalyst material.

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